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PROTECTIONISM AND STRUCTURAL ADJUSTMENT

Costs and consequences of non-tariff measures which adversely affect exports of developing countries

Report by the UNCTAD secretariat

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Summary and conclusions

1. As a result of post-war agreements, tariff levels are no longer considered the most important barriers to trade. This report studies the costs and consequences of non-tariff measures, in particular those which adversely affect exports of developing countries.

2. The list of non-tariff measures is very long, ranging from very strict explicit measures like import or export quotas to rather subtle measures such as customs procedures or health and safety regulations. In general, the explicit measures can be expected to have a more limiting effect on trade flows; it is these measures that are studied in this report.

3. The textile and apparel sectors are the most protected sectors in the world. And this protection is clearly discriminatory against the export interests of the developing countries. Under the GATT Multifibre Arrangement (MFA) exports from developing countries are limited by export quotas resulting from bilateral agreements negotiated with importing developed countries. Academic studies conclude that, for many developing country exporters, prices are roughly 25 per cent higher as a result of trade restrictions, including tariffs and MFA quotas. The rents associated with these higher prices are split in almost equal proportions between developing country exporters (who receive the quota rents) and developed country Governments (which collect tariff revenues). The quota rents thus received are small compensation for the very large sacrifice in export volumes that result from the MFA. In the interest of an open and free trading environment, the MFA should be terminated.

4. The effects of other non-tariff measures were studied using the UNCTAD data base on non-tariff measures. In total, 3,845 country product cases were identified for which imports into a particular developed country from developing countries were subject to an explicit non-tariff measure; exports from developing countries valued at $25.6 billion were affected. The major product sectors are: seafood in Japan; sugar in the EC, Japan and the United States; tuna and steel products in the United States; and agricultural products, consumer electronics, footwear and steel products in the EC.

5. Recognizing the extreme difficulty of quantifying the effects of non-tariff measures on trade flows, the study, nevertheless, did produce estimates of some of the losses in exports of developing countries owing to non-tariff measures. The estimating methodology was based on the pattern of trade between developing countries and control countries selected from among the major importing countries whose imports of the particular product being studied were not restrained by an explicit non-tariff measure. In total, non-tariff measures lowered exports from developing countries by an estimated $4.6 billion or by 18 per cent of their current exports of the products to the restraining countries. The major product sectors are: seafood in Japan; steel products and consumer electronics in the EC.

6. The report points out that the estimating methodology used in this study tends to underestimate the losses in certain circumstances, especially when the restraint covers imports from all sources. As a check on this study, the results from a recent study on the "economic effects of significant United States import restraints" conducted by the United States International

Trade Commission were compared. 1/ The USITC study confirms the results of the present study for textiles and apparel, including the price and quantity effects. It also identifies the steel sector as being subject to numerous restraints that apply to developing countries; it concludes that the quotas were effective during 1985 and 1986, less so during 1987, but by 1988 the quotas were by and large, not restraining. Regarding agricultural products, the USITC study confirms significant restraining effects of sugar quotas on exports of developing countries. There are also very strict limits on United States imports of cotton, dairy products and peanuts, which undoubtedly harm the export interests of developing countries. However, because of the very low base levels of imports of these products, the USITC estimates of the trade losses in these sectors are not very large. For the same reason the present study failed to identify these products as among those facing serious non-tariff measures.

I. INTRODUCTION

7. In its decision 367 (XXXV) the Trade and Development Board requested the UNCTAD secretariat "to carry out a study of the costs and consequences of non-tariff measures, in particular those which adversely affect exports of developing countries". The present study is in response to that request.

8. As a result of the declining levels of tariffs that have been achieved during the post-war period, tariffs are no longer considered the most important barrier to trade. Current attention has increasingly been directed at the rather broad range of other instruments used by Governments to protect domestic industry from import competition.

9. The list of these so-called non-tariff measures runs the gamut from controversial anti-dumping and countervailing duties to GATT-sanctioned escape clause action and export restraints negotiated under the Multifibre Arrangement, to extra-GATT voluntary restraints on steel products. They range from explicit measures such as import quotas and voluntary export restraint agreements (i.e. export quotas) to subtle customs procedures and health, safety and technical standards. In general, the explicit measures can be expected to be the more protective than the implicit or more subtle measures. However, in some cases the explicit measures have rather modest effects on trade while more subtle measures are extremely protective.

10. For example, an import quota is very explicit; it limits imports to a predetermined volume. To the extent that the quota limit is below the free trade volume, the quota is protective - the lower the quota limit the more protective the measure. However, if the quota limit is near the free trade volume, the quota would have minimal restrictive effects on trade. In contrast, a health regulation might require imported products to meet certain standards that are equivalent to those required of domestic goods. So long as the foreign producer is able to comply with those standards, the measure would have no protective effect at all. On the other hand, if the foreign producer cannot meet the standard, imports would be prohibited; the protective effect is the most extreme possible.

11. Clearly, quantifying the effects of non-tariff measures on international trade flows is most difficult. One must first identify the non-tariff measures facing developing countries. Second, the identified measures must be categorized to determine which measures are likely to have the more adverse effects on exports. And finally, the costs to the developing countries of these measures must be estimated.

12. By far the most serious non-tariff measure affecting exports of developing countries is the export restraint programme under the GATT Multifibre Arrangement (MFA). Exports of textile and apparel products from more than 30 developing countries are restrained by 1 or more of the industrial countries. This programme has been extensively studied; consequently, its implications for developing countries will be discussed in a separate section below.

13. The plan of this study is as follows. Section II will identify those non-tariff measures affecting exports of developing countries; the most significant ones will be highlighted. The impact of the important non-tariff measures on exports of developing countries will be estimated in section III. The implications of the MFA will be discussed in section IV.

II. IDENTIFICATION OF NON-TARIFF MEASURES

14. The UNCTAD secretariat has compiled an extensive data base on non-tariff measures applied by importing countries at the border. Because of the extreme difficulty of quantifying the protective effect of subtle measures, this study will concentrate attention on the more explicit measures including import quotas, import licensing, voluntary export restraints (export quotas), variable levies, price control measures and import monopolies. See annex I for a list of explicit non-tariff measures applied by selected developed countries.

15. The UNCTAD data base includes non-tariff measures implemented by 22 major Western industrial countries, namely 10 individual countries and the member States of the European Communities (EC) included as 1. Non-tariff measures are introduced and administered for products defined under national tariff schedules at the tariff line level of aggregation. The data base identifies individual tariff line items subject to non-tariff measures; trade flows affected by these measures are also included in the data base at the tariff line level of aggregation.

16. Many of the industrial countries define products for tariff purposes under the harmonized tariff schedule (HTS). The HTS schedules of different countries are harmonized to the 6-digit level of disaggregation. Countries often further refine product definitions for tariff purposes by defining products at the 8- or 10-digit levels of disaggregation, so-called tariff lines. In order to compare the effects of non-tariff measures across importing countries, the data base aggregates trade flows subject to non-tariff measures to the 6-digit level. Such aggregation will often result in HTS categories that include tariff line items subject to non-tariff measures and also tariff line items without non-tariff measures. The statistics do, however, permit the UNCTAD secretariat to calculate the share of imports of a 6-digit HTS category that are affected by non-tariff measures.

17. Summary statistics from the UNCTAD data base on non-tariff measures are reported in table 1. Data are reported for each of the 11 reporting countries, with breakdowns by source of imports (developing countries or the world) and by product aggregations (6-digit level and tariff lines subject to non-tariff measures). In total, 3,845 country-product cases have been identified affecting a total of $25.6 billion worth of exports from developing countries.

18. The EC has the greatest number of HTS categories with non-tariff measures affecting the exports of developing countries. However, it should be pointed out that anti-dumping and countervailing duty actions are included for the EC (and Canada), whereas they are not included for Australia and the United States. 2/ By values, $12.5 billion worth of developing country exports to the EC are affected by non-tariff measures; this accounts for almost one half of the total developing countries exports affected by

non-tariff measures included in table 1. Japan and the United States are the only other countries whose imports from developing countries subject to non-tariff measures exceed $1 billion. 3/ In total, 68 per cent of all of the trade covered by table 1 is affected by non-tariff measures.

19. The next problem is to identify those non-tariff measures that most seriously affect exports of developing countries. This is a problem because the data are influenced by conflicting forces. First, non-tariff measures against products that are primarily exported by developing countries are of major concern. This implies that emphasis should be given to those products subject to non-tariff measures which are exported in large volumes by the developing countries.

20. The second issue deals with the restrictive effect of the non-tariff measures. If a particular non-tariff measure is extremely restrictive, the volume of trade would be small. Thus, giving emphasis only to those items with large trade flows might overlook those items facing the most extreme non-tariff measures. In contrast, those non-tariff measures that are the least restrictive and, therefore should be of least concern, might result in large trade volumes.

21. To summarize, identifying those non-tariff measures that most seriously affect the exports of developing countries' products purely on the basis of imports from developing countries is likely to over-emphasize some items subject to less restrictive measures and overlook other items subject to extremely restrictive measures.

22. A second indicator would be the extent to which the non-tariff measure affects imports from developing countries rather than developed countries. If imports from both sources are subject to non-tariff measures, one might presume that both are equally affected. While that may not be the case, data on trade flows would not provide a basis for determining whether imports from developed countries were more or less restricted than imports from developing countries.

23. A third indicator would be the extent to which domestic output in the importing countries is protected by a non-tariff measure. The more restrictive the measure, the more likely it is that domestic output would account for a constant or increasing share of consumption. Conversely, the less restrictive the measure, the greater the increase in import penetration. Clearly, if imports from developing countries, individually and in total, were to grow more rapidly than imports in general and more rapidly than domestic consumption, the non-tariff measure might be considered of lesser importance. Unfortunately, there are significant data problems in investigating the relationships between imports and domestic production. 4/

24. As a second-best solution to the above-mentioned statistical problems, the identification of products subject to non-tariff measures that most seriously affect exports of developing countries will be based on the value of imports into the restraining country from developing countries that are subject to non-tariff measures. The products listed in table 2 account for 70 per cent of the exports from developing countries to the countries listed in table 1 that are affected by non-tariff measures, defined and quantified at the tariff line level of aggregation.

Table 1: Imports from developing countries and the world of products subject to non-tariff measures

Import Restraining Country	Number of HTS Categories	Imports from the World HTS $000	Imports from the World NTM $000	Imports from Dev'g Ctys HTS $000	Imports from Dev'g Ctys NTM $000
Australia	43	2 017 052	1 220 681	163 270	148 942
Austria	313	1 460 338	1 094 386	79 609	45 380
Canada	400	5 198 968	4 181 138	996 207	848 527
EEC	619	76 445 244	44 882 336	25 085 582	12 544 336
Finland	314	2 589 872	2 421 712	285 207	238 421
Japan	414	32 549 427	29 316 652	10 543 252	8 361 725
Norway	595	1 740 973	1 343 457	228 830	77 965
New Zealand	189	340 111	233 647	66 500	49 671
Sweden	361	2 124 662	1 781 185	255 419	206 335
Switzerland	299	4 393 393	3 828 158	391 236	179 822
United States of America	298	22 384 845	12 642 677	8 208 818	2 930 712
Total	3 845	151 244 885	102 946 029	46 303 930	25 631 836

Source: UNCTAD secretariat calculations.

Column headings: 1. Import restraining country. 2. Number of HTS product categories that include tariff lines affected by non-tariff measures. 3. Imports from the world of HTS product categories that include tariff lines subject to non-tariff measures. 4. Imports from the world of tariff lines subject to non-tariff measures. 5. Imports from the developing countries of HTS product categories that include tariff lines subject to non-tariff measures. 6. Imports from the developing countries of tariff lines subject to non-tariff measures.

Table 2: Imports from developing countries of products subject to non-tariff measures

HTS Product Category	Description	Importing country	Imports a/ Subject to NTM	Import Shares b/ Cum NTM	Dev'g Total	Dev'g NTM	World NTM
30613	Crustaceans	JPN	2 203 215	9	86	100	100
71410	Manioc	EEC	1 157 423	13	100	100	100
170111	Sugar, raw	EEC	884 678	17	86	100	100
170111	Sugar, raw	USA	614 410	19	93	100	100
852810	TV receivers	EEC	521 527	21	43	44	48
720260	Ferro-alloys	EEC	511 746	23	94	100	100
640399	Footwear, leather uppers	EEC	500 975	25	70	100	100
160419	Fish, preserved	JPN	461 434	27	98	100	100
640411	Foorwear, textile uppers	EEC	454 791	29	94	100	100
160414	Tuna, preserved	USA	372 323	30	98	98	98
30759	Molluscs	JPN	332 813	31	81	100	100
160250	Bovine, preserved meat	EEC	322 507	33	87	100	100
640319	Footwear, leather uppers	EEC	309 892	34	90	100	100
30349	Fish, frozen	JPN	303 575	35	92	100	100
30799	Molluscs	JPN	301 662	36	74	100	100
80510	Oranges, fresh	EEC	299 731	37	64	99	99
20130	Bovine, fresh meat	EEC	299 593	38	85	100	100
30791	Molluscs	JPN	296 196	40	79	100	100
30379	Fish, frozen	JPN	292 211	41	38	100	100
90111	Coffee, raw	CAN	256 501	42	99	100	100
430310	Apparel, fur	JPN	255 974	43	80	100	100
640610	Footwear uppers and parts	EEC	237 405	44	96	100	100
640299	Footwear of rubber	EEC	236 356	45	94	100	100
20230	Bovine, frozen meat	EEC	234 328	45	75	100	100
30342	Fish, frozen	JPN	228 833	46	97	100	100
640419	Footwear, textile uppers	EEC	228 565	47	94	100	100
730630	Steel, pipe	USA	224 557	48	66	74	63
170310	Molasses	EEC	217 678	49	84	100	100
30192	Fish, live	JPN	213 603	50	100	100	100
852313	Magnetic tapes	EEC	211 526	51	29	86	72
160590	Molluscs, preserved	JPN	207 635	51	79	100	100
170111	Sugar, raw	JPN	202 602	52	44	100	100
30749	Squid	JPN	197 255	53	83	100	100
852110	Video recorders	EEC	188 678	54	16	84	86
270112	Coal	JPN	188 414	55	4	100	100

Table 2: Imports from developing countries of products subject to non-tariff measures (continued)

HTS Product Category	Description	Importing country	Imports a/ Subject to NTM	Import Shares b/ Cum NTM	Dev'g Total	Dev'g NTM	World NTM
720712	Steel, semi-finished	USA	183 202	55	42	100	95
50510	Feathers	JPN	170 282	56	84	100	100
80810	Apples, fresh	EEC	168 845	57	37	100	100
230890	Animal feed	EEC	161 468	57	48	97	81
30342	Tuna, frozen	EEC	151 551	58	91	100	100
640359	Footwear, leather uppers	EEC	149 220	58	51	100	100
100620	Rice, husked brown	EEC	149 012	59	58	100	100
640391	Footwear, leather uppers	EEC	148 984	60	62	100	100
10290	Bovine, live	EEC	148 159	60	50	100	100
640520	Footwear, textile uppers	EEC	139 682	61	91	100	100
80620	Grapes, dried	EEC	138 345	61	50	100	100
30749	Squid	EEC	134 925	62	72	52	61
720712	Steel, semi-finished	EEC	127 935	62	69	100	100
720610	Steel, ingots	CAN	123 580	63	98	100	100
30490	Fish, frozen fillets	JPN	122 559	63	33	100	100
30269	Fish, fresh	JPN	121 171	64	73	100	100
731210	Steel, wire	USA	112 804	64	27	71	66
80610	Grapes, fresh	EEC	112 770	65	53	100	100
121220	Seaweed	JPN	110 391	65	95	100	100
71420	Sweet potatoes	EEC	99 769	65	96	100	100
721331	Steel bars and rods	EEC	94 542	66	42	100	100
150910	Olive oil	EEC	94 451	66	100	100	100
30611	Crustaceans	JPN	93 316	66	53	100	100
720110	Non-alloy pig iron	EEC	92 618	67	39	100	100
220710	Ethyl alcohol	USA	91 984	67	88	99	99
720241	Ferro-alloys	EEC	89 227	67	20	100	100
30232	Fish, fresh	JPN	88 352	68	84	100	100
721049	Steel, flat zinc coated	USA	87 747	68	15	87	86
70200	Tomatoes, fresh	EEC	85 972	69	32	100	100
80820	Pears and quinces, fresh	EEC	85 000	69	53	99	99

Table 2: Imports from developing countries of products subject to non-tariff measures (continued)

HTS Product Category	Description	Importing country	Imports a/ Subject to NTM	Import Shares Cum NTM	Dev'g Total	Dev'g NTM	b/ World NTM
240120	Tobacco, unmanufactured	JPN	83 422	69	23	100	100
20120	Bovine, fresh meat	EEC	82 740	70	34	100	100
720824	Steel, flat rolled	USA	82 226	70	21	100	100
Subtotal			17 896 863	70	67	97	96
Other Products			7 734 973	30	51	91	89
Total			25 631 836	100	56	93	91

Source: UNCTAD secretariat calculations.

a/ The value of imports from developing countries of the HTS category that are subject to non-tariff measures, i.e., calculated at the tariff line level (in $000). The HTS categories in this table are ranked by the descending value of this variable.

b/ The import shares are, respectively, the cumulated share of the value of developing country exports subject to non-tariff measures (as a per cent of the total value of developing country exports subject to non-tariff measures); the share of total imports of the HTS category accounted for by developing countries; the share of imports of the HTS category from developing countries that are subject to non-tariff measures; and the share of imports of the HTS category from the world that are subject to non-tariff measures.

25. The top seven listed products account for 25 per cent of the total value of developing country exports of products subject to non-tariff measures; these products are crustaceans imported by Japan, manioc imported by the EC, sugar imported by the EC and the United States, and EC imports of TV receivers, ferro-alloys and leather footwear. As a general description, Japan extensively restricts imports of seafood, the United States restricts imports of tuna and steel products, and the EC restricts imports of agricultural products, footwear and consumer electronics; all three of these major importers also restrict imports of sugar.

III. ESTIMATED LOSS OF EXPORTS OWING TO NON-TARIFF MEASURES

26. Estimating the costs of the non-tariff measures to the developing countries in terms of losses in exports is much more difficult than identifying those products and markets for which the non-tariff measures are expected to have the more serious adverse effects. Clearly, any errors in identifying products and markets will, in turn, produce errors in estimating losses. In addition, there will be errors in estimation as well.

27. The basic concept underlying the estimation methodology is that the loss in exports is the difference between the actual level of exports that did exist given the non-tariff measure and the higher level of exports that would have existed if the non-tariff measure were absent. Since the actual level of exports can be observed, the estimation problem is to determine the level of exports that would have existed in the absence of the non-tariff measure; this is often referred to as the hypothetical or counterfactual level of exports. Thus, the loss is

LOSS = (hypothetical exports) - (actual exports).

28. The hypothetical level of exports is estimated on the basis of the trade experience of a control country. 5/ A control country is identified for each product subject to a non-tariff measure. In general, the control country is the world's largest importing developed country among those countries that do not have a reported non-tariff measure on the product. In some cases, it was felt more approipriate to use Japan or the United States as the control country instead of the largest importer. This substitution of control countries generally occurred when the largest importing country's pattern of trade differed significantly from that of the other developed countries.

29. The estimated losses for the major country-product cases are reported in table 3. The products listed account for 75 per cent of the total estimated losses. 6/ Most of the cases included in table 3 are expected on the basis of the identification exercise reported in table 2. Developing country losses owing to non-tariff measures in the Japanese market are primarily in the seafood categories; the United States market is most restrained for steel products; and the EC restrains imports of steel products, consumer electronics and selected agricultural products. 7/ However, there are some products for which the estimated losses are much more significant that the trade flows would have implied. The implication is that the non-tariff measures on these products tend to be more restrictive. These cases seem to be more prevalent in the EC market, e.g., ball bearings, fertilizers, and fibreboard, all involving antidumping action. Japan also restrains imports of coal to the disadvantage of the export interests of the developing countries.

Table 3: Estimated loss of exports from developing countries owing to non-tariff measures a/

HTS Product Category	Description (Measure) b/	Importing Country	Estimated Loss	Cumulated Share	Imports Subject to NTM	Control Country
30613	Crustaceans (IA)	JPN	331 926	7	2 203 215	USA
30379	Fish, frozen (IQ)	JPN	237 219	12	292 211	USA
720712	Steel, semi-finished (VER)	USA	215 257	17	183 202	JPN
230890	Animal feed (IL)	EEC	163 078	21	161 468	JPN
730630	Steel, pipe (AD)	EEC	162 068	24	60 749	JPN
730660	Steel, pipe (IS)	EEC	145 583	27	31 020	JPN
720924	Steel, cold rolled (VER)	USA	142 294	30	24 901	JPN
721420	Steel, structural (VER)	EEC	130 532	33	41 136	JPN
848210	Ball bearings (AD)	EEC	116 579	36	25 142	JPN
721633	Iron, steel, H sections (VER)	USA	112 342	38	20 127	JPN
730630	Steel, pipe (VER)	USA	111 625	41	224 557	JPN
720241	Ferro-alloys (?) (VER)	EEC	108 999	43	89 227	JPN
80620	Grapes, dried (RP)	EEC	106 958	45	138 345	USA/CAN
721331	Steel, bars and rods (VER)	EEC	105 309	48	94 542	JPN
720221	Ferro-silicon (?) (VER)	EEC	96 748	50	26 501	JPN
721070	Steel, non alloy, painted, etc. (VER)	USA	91 611	52	24 401	JPN
852313	Magnetic tapes (ADD)	EEC	88 456	54	211 526	USA
310520	Fertilizers (ADD)	EEC	85 795	56	45 088	JPN
270111	Coal (IQ)	JPN	63 509	57	35 246	USA/EEC
720712	Steel, semi-finished (IM)	CAN	61 516	58	50 824	JPN
50400	Animal, organs (IA)	JPN	60 393	60	22 729	EEC
731210	Steel, wire (VER)	USA	59 174	61	112 804	EEC
852110	Video recorders (AD)	EEC	59 056	62	188 678	CAN
721012	Steel, tin coated (VER)	EEC	58 952	64	37 566	JPN
852311	Magnetic tapes (AD)	EEC	57 179	65	45 611	USA
441111	Fibreboard (AD)	EEC	56 892	66	27 041	USA
270112	Coal (IQ)	JPN	51 671	67	188 414	EEC
721440	Steel, hot rolled (VER)	EEC	51 193	68	21 354	AUS
721933	Steel, stainless (VER)	EEC	51 016	69	18 436	JPN
721331	Steel, bars and rods (VER)	USA	46 327	70	36 024	JPN
210690	Food preparations (IQ)	JPN	45 770	71	28 764	AUS
280469	Silicon (AD)	EEC	41 507	72	26 463	JPN
720712	Steel, semi-finished (VER)	EEC	41 036	73	127 935	JPN
160590	Molluscs, preserved (AI)	JPN	39 568	74	207 635	EEC
170310	Molasses	EEC	38 663	75	217 678	JPN/USA
Subtotal			3 435 800	75	5 290 560	
Other Products			1 147 960	25	20 341 276	
Total			4 583 760	100	25 631 836	

Source: UNCTAD secretariat calculations.

a/ Column headings: 1. HTS product code; 2. Product descriptions; 3. Importing country; 4. Estimated loss of exports from developing countries owing to non-tariff measures on the HTS product category; 5. Cumulated share of col. 4; 6. Imports from developing countries subject to non-tariff measures ($000); 7. The control country used to estimate the loss. The control country is generally the largest importing country whose imports are not restricted by explicit non-tariff measures; in some cases the United States of America or Japan were preferred as control countries even when they were not the largest importing country - the largest countries are indicated after the slash.

b/ The non-tariff measures are: AD - antidumping action, IA - import authorization, IL - import licensing, IM - import monitoring, IQ - import quota, IS - import surveillance, RP - reference price, and VER - voluntary export restraint.

30. Strong caution must, however, be exercised against concluding that the product-country cases included in table 3 are the most important cases in which the export interests of the developing countries are being frustrated by non-tariff measures. Large estimated losses occur in those cases in which:

(a) Imports from the world are large in value;

(b) The share of imports from developing countries subject to non-tariff barriers is large; and,

(c) The share of total imports accounted for by developing country suppliers is large in the control country (or small in the import restraining country).

The estimation method used in this study would significantly underestimate the true loss of exports from developing countries in the following situations:

(a) If all imports are significantly restrained by non-tariff measures, imports from the world would be small;

(b) If the non-tariff measures are highly restrictive and narrowly defined to exclude some tariff lines in the HTS category, the share of imports from developing countries subject to non-tariff measures would be small; and,

(c) If the share of total imports accounted for by developing country suppliers is large in the import restraining country the non-tariff measure could significantly impact on developing country exports even though the control country would have a smaller share of total imports originating in developing countries.

31. Of these three situations, the second and third are likely to exist for product-country cases included in table 2 (i.e., product-country cases identified as serious non-tariff measures) but with estimated losses reported in table 3 that are relatively small (situation b) or zero (situation c). 8/

IV. TEXTILES AND APPAREL RESTRAINTS UNDER THE MFA

32. Textiles and apparel are the most protected sectors in the world today, dating back to the late 1950s. 9/ This constituted the first post-war steps towards new protection which occurred in conjunction with the multilateral movement towards liberalization of international trade in manufactures. By the early 1960s, the protection for cotton textiles was accepted on a multilateral basis. This programme, initially envisaged as temporary and declining protection, eventually was expanded into the GATT Multifibre Arrangement (MFA) in 1974, renewed in 1977 and again in 1981 and 1986. Unlike protection afforded other manufactured products, the textiles and apparel sectors in the developed countries appear to be the recipients of permanent protection. 10/

33. The MFA was initially intended to provide for an orderly but controlled liberalization of international trade in textiles and apparel. The restraint mechanism was to be bilateral export restraint arrangements negotiated between an importing developed country and an exporting developing country. In the beginning, bilateral export restraint arrangements were limited to the major supplying countries. Over time, however, as emerging developing country

suppliers became more competitive, export restraint arrangements were negotiated with more and more developing countries. Today, more than 50 countries are signatories to the MFA; the United States has bilateral agreements with more than 30 countries covering more than 80 per cent of United States imports of textiles and apparel from developing countries and the EC has bilateral agreements with more than 25 countries. The only significant block of trade in textiles and apparel that is not subject to restraint is trade among the developed countries themselves, excluding Japan.

34. The bilateral agreements themselves are quite complex with quotas established for various product categories, that differ across agreements. The agreements also include flexibility provisions for the "over use" of a particular quota on a temporary basis. Thus, quantifying the restrictive effects of the MFA programme are extremely difficult.

35. Inherent in the MFA programme are economic incentives for the distortion of international trade. As exports from particular competitive developing country suppliers become increasingly restrained, buyers in the importing country have incentives to switch their orders to other suppliers including, developing countries whose exports are not yet restrained, developed country exporters, and domestic producers. Over time more and more developing countries would be subject to MFA restraint agreements.

36. At the same time as developing country exports are restrained for particular products, they have an incentive to broaden the range of textiles and apparel being exported to include items not subject to restraint. But again, success breeds failure as the restraint agreements would also be broadened to cover these new export items.

37. A final incentive for developing country exporters faced with restrictive limits on their exports is to upgrade their exports from lower staged items (e.g., yarn) to higher stage items (e.g., fabric) and to upgrade the quality of their export items; both types of upgrading increase the value of a limited quantity of exports. And, of course, there is the incentive to charge what the market in the importing country will bear; i.e., effective quotas provide monopoly power for the seller that can be captured by the exporting developing country as so-called "quota rents".

38. The empirical evidence tends to support the following conclusions regarding the effects of the MFA on trade patterns. 11/ In comparison with rates of growth in consumption of the importing countries, those developing countries whose exports are restrained experience slower growing export quantities but faster growing export revenues; thus, the unit value benefit from upgrading and quota rents has more than offset the slow growth in export volumes. The quota rents for textiles and apparel have been estimated to be in the range of 15 per cent and 25 per cent, respectively, of the unit values. The experience of the non-restrained developing country exporters is quite different; their export quantities have grown quite rapidly with only modest increases in unit values.

39. Over time as buyers and producers respond to the economic incentives created by the MFA it can be expected that the share of imports subject to restraint would increase, and the quotas would become increasingly binding. Thus, as a share of the total market, the primary beneficiaries of the MFA are domestic producers in the import restraining countries rather than non-restrained developing country exporters.

40. The MFA is clearly discriminatory against the export interests of developing countries. Excepting some restraints on Japan, exports from one developed country to another are not restrained by MFA quotas. Such a programme is definitely inconsistent with the most-favoured-nation principle of the GATT. The restrained developing country exporters do benefit from the administrative arrangement that transfers the quota rents to them. However, this is small compensation indeed for the very large sacrifice in export volumes that result from the MFA. In the interests of an open and free trading environment, the MFA should be terminated.

Notes

1/ Those results of the USITC study that relate to exports from developing countries are summarized in annex III.

2/ The four industrial countries with the greatest incidence of anti-dumping and countervailing actions are Australia, Canada, the EC and the United States. During 1980-1988 the United States had 473 anti-dumping and 282 countervailing actions; see UNCTAD/ITP, "Selected issues on restrictions to trade", chapter II. For details on stock and flow of anti-dumping and countervailing actions in the period 1987-1990 see TD/B/1282, "Problems of protectionism and structural adjustment", report by the UNCTAD secretariat, paragraph 29.

3/ This figure is notably higher if anti-dumping and countervailing actions for the United States and Australia were included, as they are for the EC.

4/ Typically, products defined for purposes of collecting statistics on trade differ from products defined for purposes of collecting statistics on domestic production, consumption, employment, etc. The statistical problems in concording trade statistics with domestic production statistics would require more time and resources than are available for this study.

5/ The method of estimation is presented in much more detail in annex II.

6/ The total losses were estimated using a sample consisting of the 223 product-country cases accounting for the largest values of developing country exports subject to non-tariff measures, identified at the tariff line level of aggregation. The total estimated losses from this sample was $4.1 billion, which was then extrapolated to $4.6 billion since this sample accounted for 90 per cent of the total value of developing country exports subject to non-tariff measures.

7/ It should be pointed out that eight of the 20 non-tariff measures listed in table 3 for the EC involve antidumping actions; such actions for Australia and the United States were not yet included in the UNCTAD data base.

8/ Situation (a) would yield small levels of imports from developing countries and, therefore, small levels of imports subject to non-tariff measures. Such cases would not be identified as non-tariff measures which seriously affect the export interests of developing countries and, therefore, would not be included in table 2 or table 3.

9/ Certainly, numerous agricultural products are subject to equally restrictive trade measures. But the protection afforded agricultural products differs across importing countries and the protective measures differ as well. In contrast, the system of protection afforded textiles and apparel is comprehensive; the more competitive developing country exporters face similar restraints in the markets of most developed countries.

10/ Examples of sectors that did benefit from protection at one time, but no more, include automobiles, colour television receivers and footwear in the United States. Even the multinational example of protection for the steel sectors, though in force today, appears to be facing a finite duration as announced by the United States Administration.

11/ See William R. Cline, The Future of World Trade in Textiles and Apparel, (Washington, D.C.: Institute for International Economics, 1987).

Annex I

SELECTED EXPLICIT NON-TARIFF MEASURES

Country	Non-tariff measures a/
Australia	Tariff quotas (textiles and footwear)
Austria	Import licensing Variable levies
Canada	Dairy products Import quotas (footwear, terminated)
EEC	Common Agricultural Policy Steel arrangements Residual national measures Voluntary export restraints (footwear, consumer durables)
Finland	Quotas Import licensing Variable levies
Japan	Import quotas (agricultural products) Variable levies State monopolies
New Zealand	Quotas/licensing industry plans
Norway	Ban of 1934 (agricultural products) Import licensing (East Asia)
Sweden	Variable levies
Switzerland	Quota system (agriculture) Three phase (fruits and vegetables) Take-over (agriculture)
United States	Section 22 (agriculture) Steel arrangements

a/ Voluntary export restraint agreements on textiles negotiated under the GATT multifibre arrangement (MFA) are excluded from this table as are antidumping and antisubsidy (countervailing duty) measures.

Annex II

METHODOLOGY USED TO ESTIMATE LOSS

This study aims to estimate the loss of exports from developing countries owing to non-tariff measures imposed by importing countries. There are three standard methodologies used to estimate such losses in exports:

1. Use of an econometric model that incorporates the major determinants of a particular trade flow, including the effects of any non-tariff measures. The development of such models is highly demanding on data and knowledge about the particular market and product being studied. This approach would require more resources and time than are available for the present study.

2. Use of standard partial equilibrium models constructed using economic theory and parameter values taken from prior studies. Unfortunately, the parameter values needed for this study cover more countries and more narrowly defined products that are available. Consequently, this approach is not feasible.

3. Use of market share models in which an actual trade flow is compared with an hypothetical trade flow which is estimated using the market share experience in a control country whose imports are not restricted by the measure being studied. This approach is less demanding regarding prior information about the market and product being studied; moreover the data needed to estimate the hypothetical trade flows are readily available.

All three methods, of course, yield estimates of the loss of exports from developing countries owing to non-tariff meausres, i.e., estimates that involve statistical error. Most scholars would prefer to use the first method, since the resulting statistical calculations include indicators of the significance of the statistical error. However, in many cases, especially when studying the markets for narrowly defined products, the statistical results incorporate large statistical error - so large that the estimated impact of non-tariff measures are judged inadequate. Moreover, the time and resources required to construct satisfactory models for each of the products and markets under investigation are beyond those available.

The second method is quite flexible in that the model can be adapted to incorporate particular characteristics of the market and product being studied. However, the resulting estimates are highly sensitive to the parameter values being used. Since the parameter values are taken from prior studies, they are sometimes more and sometimes less appropriate for the particular market and product under examination. The use of inappropriate parameter values will produce estimates that could involve significant measurement error. Unfortunately, there are no objective criteria for judging the likely magnitude of the estimation error. One must depend upon subjective tests of reasonableness.

The third method also involves estimation problems. The final estimate is simply the difference between the actual trade flow and the estimated hypothetical trade flow. It is presumed that this residual can be wholly attributed to the non-tariff measure being studied. In reality, however, the estimated residual may be influenced by differences between the import restricting country and the control country. The selection of a

representative control country is critical in that the control country must have a pattern of international trade that closely matches the pattern of trade of the restricting country under investigation. As with the second method, there are no objective criteria for determining whether the control country is appropriate and it is therefore impossible to place limits on the likely magnitude of the estimation error. Because of time and resource limitations, the present study uses the third method. The calculations are based on the following definitional relationship:

$$D_{ntmA} = [D_{ntmA}/D_{tA}]\ [D_{tA}//W_{tA}]\ W_{tA} \qquad (1)$$

where D and W are imports from developing countries and the world, respectively, subscript ntm indicates those items in the HTS product category subject to non-tariff measures, subscript t indicates total imports of all items in the HTS product category, and subscript A indicates the imports are into the trade restricting market (i.e., the actual trade flow being investigated). Equation (1) can be rewritten in terms of trade shares as:

$$D_{ntmA} = S_{nA} * S_{dA} * W_{tA} \qquad (2)$$

where S_{nA} is the share of actual developing country exports of the HTS product category that are affected by non-tariff measures, and S_{dA} is the share of actual imports of the total HTS product category that originate in developing countries. The actual trade flow subject to the non-tariff measure is D_{ntmA}. The hypothetical trade flow is estimated using a control country. Since the control country is selected from among those countries whose imports are not restrained by non-tariff measures, the only information relevant to exports from developing countries is their export performance relative to that of other countries. In particular, S_{dC} is the share of imports of the HTS product category into the control country that originates in developing countries. Thus, the hypothetical trade flow is:

$$D_{ntmH} = S_{nA} * S_{dC} * W_{tA} \qquad (3)$$

where all terms on the right-hand side are as defined above. The left-hand term measures the hypothetical value of imports from developing countries of items in the HTS product category subject to non-tariff measures that would exist were the non-tariff measures to be discontinued. This is not an estimate of the total value of imports from the developing countries of the HTS product category into the restraining country. To get such an estimate it would be necessary to add imports from developing countries of those items in the HTS product category that are not subject to non-tariff measures.

The final step is to calculate the loss of exports from developing countries owing to the non-tariff measures. The loss is:

$$LOSS = D_{ntmH} - D_{ntmA}. \qquad (4)$$

To highlight the crucial elements in this estimation method, equation (4) is rewritten as

$$LOSS = [S_{dC} - S_{dA}]\ S_{nA} * W_{tA}. \qquad (5)$$

The loss will be positive when the first term in brackets is greater than the second term, i.e., when the developing countries share of total imports of the HTS product category is greater in the control country than in the import restraining country. This is most likely to occur when the non-tariff measures are more restrictive on imports from developing countries than they are on imports from other countries. In other words, imports of items in the HTS product category subject to non-tariff measures are more important to the developing countries than to other countries. Restraints on trade in these items more seriously limits exports from developing countries which, in turn, reduces their share of imports of the total HTS product category.

In contrast, if the non-tariff measure is less restrictive for imports from developing countries, their share of total imports into the restraining country will be higher than otherwise. In this case, the estimated loss would be negative. The implication might appear to be that the export interests of developing countries benefit from the non-tariff measure which primarily limits competition from other sources of imports. While this conclusion is possible, its likelihood is rare. The truth is more likely to be that the non-tariff measure limits imports from both developing and other countries to the benefit of domestic producers in the restraining country. In all probability, developing country exports are being restrained and losses do exist. Consequently, whenever the estimated loss is negative, the loss is set to zero. Because of the high probability that in such cases the losses are in fact positive, the results presented in table 3 are considered to be lower estimates of the true adverse affects of non-tariff measures on the export interests of developing countries.

Annex III

ECONOMIC EFFECTS OF SIGNIFICANT UNITED STATES IMPORT RESTRAINTS

1. On 9 September 1988, the United States Senate Finance Committee requested the United States International Trade Commission (USITC) to conduct a study on the economic effects of existing significant United States import restraints. a/ The USITC was requested to assess the effects on United States consumers, on output and profits of United States firms, on income and employment of United States workers, and on the net economic welfare of the United States. The USITC was also to assess the direct effects on the protected United States industry and the indirect effects on "downstream" industries that are customers of the protected industry. The USITC was directed to consider the effects of significant restraints on United States imports whether taken as a result of an Act of Congress, an action taken under the fair trade laws of the United States, or an action taken under an international agreement; however, the study was not to include those import restraints resulting from unfair trade laws, including antidumping and countervailing duty actions, infringements on intellectual property and market disruption caused by imports from non-market economy countries. b/

2. To date the USITC has issued two documents reporting the results of its study on the economic effects of significant United States import restraints on manufacturing, agricultural products and natural resources. c/ A third report on import restraints affecting services is due during September 1991. The first report assessed the economic effects of (1) high tariffs on 20 product categories, (2) voluntary export restraints on steel, (3) escape clause relief for special steel, (4) the Japanese voluntary export restraints on automobiles (expired), (5) voluntary export restraints on machine tools, and (6) import restraints on textiles and apparel under the GATT Multifibre Arrangement. The second report assessed the economic effects on five agricultural industries identified as having significant non-tariff import restraints, namely, sugar, dairy products, peanuts and cotton (protected by import quotas) and meat (protected by voluntary export restraint agreements). The results of these reports will be summarized in turn.

Import restraints on manufactured products d/

3. The effects of high tariffs will be omitted from this summary other than to list the products identified by the USITC, using the criteria of potential import volumes of at least $100 million with a tariff rate of at least 9 per cent; the product sectors include footwear, ceramic tile, methyl alcohol, luggage and handbags, leather gloves, table and kitchen articles of glass or earthenware, costume jewellery, electrical capacitors, cyclic organic items (including dyes and pigments), polyethylene resins, non-stuffed dolls, certain bicycles, ball bearings, and optical instruments.

4. In 1984 the United States Trade Representative began negotiating voluntary restraint agreements on steel products that eventually resulted in agreements with 19 countries and the European Community, e/ including seven developing countries (Brazil, Mexico, China, Republic of Korea, Trinidad and Tobago, Venezuela and Yugoslavia). The USITC studied the period 1985-1988 and found the restraint levels (i.e., quotas) to be extremely restrictive during 1985 and 1986. However, by 1987 the quotas were fully binding only for

semi-finished steel and plate; they were at least 90 per cent binding for sheet and strip, wire rod, structural shapes, and pipe and tube. By 1988 the quotas were much less restrictive. In quantitative terms, the quotas reduced import quantities by 16 per cent during 1986 and 1987 but by only 2 per cent during 1988. The price effects of the quotas were rather modest the quota premium was roughly 4 per cent during 1986 and 1987 but only one half of 1 per cent during 1988.

5. The United States stainless steel industry was granted escape clause protection (import relief under United States law) beginning in July 1983. The protective mechanism was the negotiation of orderly marketing arrangements (i.e., export quotas) that were to become integrated with the voluntary export restraint agreements negotiated under the general steel policy discussed in the previous paragraph. Consequently, the USITC concluded that the restrictive effects of the quotas on stainless steel were similar to those for steel products in general, in particular, the restraints were very binding during 1986, less during 1987 and much less during 1988.

6. The USITC study of the effects of import restraints on textiles and apparel concentrated on United States consumers, producers and workers. No attempt was made to estimate the effects of the MFA on exports of developing countries. However, two pieces of information did emerge that relate to the discussion on the effects of the MFA reported in section IV of this report.

7. First, the USITC estimated the price effect of eliminating both the MFA system of quotas and tariffs. On average, prices would fall by between 20 and 30 per cent; this range is consistent with the 25 per cent estimate reported in the text. But in addition, the USITC divided the price effect between tariff revenue collected by the import restraining country and the quota rents that would accrue to the developing country exporter. Since the tariff rates average from 13 to 21 per cent, the residual quota rents available for developing country exporters are in the range of 10 per cent. Importantly, the developing country exporters will not receive all of the estimated price effect of the MFA quotas. f/

8. Second, the adverse effects of the MFA on exports of developing countries are heavily concentrated in the apparel sector, as compared with the textile sector. This finding supports a common view that textiles and apparel are two very different industries with different factor requirements and different patterns of comparative advantage. It is apparel that is labour-intensive and the sector in which the developing countries have a natural competitive advantage. On the other hand, owing to the opportunities for large-scale mechanized production techniques, textiles are capital-intensive; developed countries can be quite competitive in this industry.

Import restraints on agricultural products g/

9. The import quotas on cotton, dairy products and peanuts limit imports into the United States to less than 2 per cent of consumption (far less than 1 per cent for cotton and peanuts). With such low import bases, the USITC estimates of the trade benefits to be derived from eliminating the non-tariff import restraints on these agricultural products are quite modest. h/ In percentage terms, however, foreign producers of dairy products and peanuts would experience increases in export volumes, from the low bases, ranging up to 100 per cent. i/

10. The primary non-tariff measure limiting United States imports of agricultural products of interest to developing countries involves sugar. Protection of the United States sugar industry dates back to 1934 and can be broken into two periods. During 1937-1974 import quotas, subsidy payments and acreage restrictions were used to support domestic prices and growers. Since 1976 import duties, import fees and import quotas have been used to prevent imports from disrupting domestic price support programmes.

11. Imports are limited by quotas allocated among 40 countries. The largest countries account for 67 per cent of the total allocation and are, in descending order, the Dominican Republic, Brazil, the Philippines, Australia, Guatemala, Argentina, and Peru. The administration of these import quotas permit the exporters to sell sugar, up to their quota limit, at United States prices which were more than $0.10 per pound above the world price; the quota rents accruing to exporters was more than $500 million during 1989. The USITC estimated that eliminating the import quotas on sugar would increase United States imports of sugar by 56 per cent while reducing the United States price by 46 per cent. This would affect exporters positively by increasing their export volumes, but negatively by reducing the quota rents currently being received. Overall, exporters would realize an increase in export values by roughly $125 million or 20 per cent.

Notes

a/ The request letter is reproduced in the Economic Effects of Significant United States Import Restraints, Phase I: Manufacturing, USITC publication 2222, (Washington D.C.: United States International Trade Commission, October 1989).

b/ Subsequent instructions received from the staff of the United States Senate Committee on Finance directed the USITC to exclude the effects of section 301 actions as well.

c/ The reports are in The Economic Effects of Significant United States Import Restraints, Phase I: Manufacturing, USITC publication 2222, (Washington D.C.: United States International Trade Commission, October 1989) and The Economic Effects of Significant United States Import Restraints, Phase II: Agricultural Products and Natural Resources, USITC publication 2314 (Washington D.C.: United States International Trade Commission, 1990).

d/ Since the import restraints covering machine tools and automobiles do not affect exports of developing countries they will be omitted from the following discussion. The United States does, however, have a VER with Taiwan Province of China limiting their exports of non-computer controlled machine tools. The agreement limits exports to 1985 levels; these quota limits have been binding. Japan is also affected by machine tool VERs, covering computer controlled machine tools. In addition, imports from Germany and Switzerland are being monitored; their Governments have been informed. The VER programme to limit imports of automobiles from Japan was effective during April 1991 through March 1985. The United States announced it would not ask for continuation of the Japanese VER beyond March 1985; however, Japan did continue to limit exports though at a level 25 per cent greater than the

April 1984 - March 1985 level. Owing to the appreciation of the yen and the productive capacity installed in the United States, this quota has not been filled. Some evidence indicates that quotas for some manufactures have been filled (Toyota, Honda, Isuzu and Suzuki), however, the USITC presented other evidence indicating the quotas are not binding.

e/ The EC agreement excluded Portugal and Spain, with which the United States had negotiated separate agreements.

f/ A policy recommendation coming from this observation might be that as a condition of limiting imports under the MFA, the import restraining governments should transfer the tariff revenue to the foreign exporter via "MFA duty-free tariff treatment".

g/ Since the major effects of import restraints on meat is to limit imports into the United States from Australia and New Zealand, and not exports from developing countries, the meat programme will not be discussed below.

h/ Even the quota rents accruing to the foreign exporters are small, roughly $2 million annually are received by all exporters of cotton, dairy products and peanuts combined (mainly exporters of cheese).

i/ The trade effects for cotton are quite small, i.e., less than 5 per cent.